

A NEW SPECIES OF *ACROSTERNUM* FIEBER,
SUBGENUS *CHINAVIA* ORIAN, FROM CUBA
(HEMIPTERA: PENTATOMIDAE)

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Abstract.—A description is provided for *Acrosternum* (*Chinavia*) *cubensis*, n. sp. New locality records are given for *A. wygodzinskyi* Rolston from Puerto Rico. A key to the eight species of *Acrosternum* known to occur in the West Indies is provided.

The genus *Acrosternum* Fieber, 1860, belongs to the group of pentatomine genera having on the ventral surface of the second visible abdominal segment an anteriorly directed spine or tubercle which is unapposed by an elevated metasternum. Such genera occurring in the Western Hemisphere are keyed by Rolston and McDonald (1981).

The New World species of *Acrosternum*, subgenus *Chinavia* Orian, 1965, were recently revised by Rolston (1983). Rider and Rolston (1986) described 3 new species of *Acrosternum* from Mexico and provided a key to the species occurring in Mexico. Also, the previously unknown male of *A. istum* Rolston was described by Rider (1986). Since the revision by Rolston, an undescribed species has been discovered from Cuba. A key is provided here for the identification of species of *Acrosternum* occurring in the West Indies.

KEY TO WEST INDIES SPECIES OF *ACROSTERNUM*

- | | | |
|-------|---|--------------------------|
| 1. | Abdominal spine projecting past middle of mesocoxae | 2 |
| – | Abdominal spine not reaching beyond anterior margin of metacoxae | 3 |
| 2(1). | Lateral margins of head black; each humeral angle rounded, not produced laterally beyond base of corium (Jamaica; Cayman Island) | <i>sparnium</i> (Dallas) |
| – | Lateral margins of head reddish-yellow; each humeral angle right-angular, produced laterally beyond base of corium by more than half the width of an eye (Hispaniola) | <i>insulani</i> Rolston |
| 3(1). | Each ostiolar ruga extending only 0.5–0.6 distance from mesial margin of ostiole to lateral margin of thorax | 4 |
| – | Each ostiolar ruga extending 0.7–0.8 distance from mesial margin of ostiole to lateral margin of thorax | 6 |
| 4(3). | Abdominal tubercle reaching middle of metacoxae; each spiracle unattended by a yellow callus (Bahama Islands) | <i>huri</i> Rolston |
| – | Abdominal tubercle barely attaining posterior limit of metacoxae; each spiracle located on or near a conspicuous yellow callus | 5 |
| 5(4). | Proximal ends of tibiae green; each spiracle located just outside posterolateral margin of yellow callus (Fig. 5); rostrum reaching beyond middle of metacoxae (Cuba) | ... |
| | | <i>cubensis</i> , n. sp. |

- Proximal ends of tibiae crimson; each spiracle located within posterolateral margin of yellow callus (Fig. 6); rostrum not reaching anterior margin of metacoxae (southern Mexico into Panama; Hispaniola) *montivagum* (Distant)
- 6(3). Abdominal tubercle barely attaining posterior limit of metacoxae (Hispaniola; South America; Galapagos Islands) *ubicum* Rolston
- Abdominal tubercle reaching middle of metacoxae 7
- 7(6). Connexiva with black macule at each posterolateral angle confined to edge of sternite, not expanding onto laterotergite (Fig. 7); each spiracle usually surrounded by a distinct yellow spot (Virgin Islands; Puerto Rico) *wygodzinskyi* Rolston
- Connexival spots at least on basal segments expanding onto laterotergites (Fig. 8); each spiracle unattended by yellow spot (southwestern United States to northern South America; Florida to Guadeloupe) *marginatum* (Palisot de Beauvois)

Acrosternum (Chinavia) wygodzinskyi Rolston

Fig. 7

Acrosternum (Chinavia) wygodzinskyi Rolston, 1983:142-144, figs. 124-127.

In his revision of *Acrosternum*, Rolston described *A. wygodzinskyi* from St. Thomas and St. John Islands in the Virgin Islands, West Indies. Since this revision, a series of *A. wygodzinskyi* has been collected from Puerto Rico. The label data is "PUERTO RICO: Guanica For., Hwy 333 nr. Playa Tamarindo 27-V-1986, E. G. Riley & D. A. Rider" (13♀, 5♂) and "PUERTO RICO: Guanica Forest, Hwy 334 at Ranger Sta. 28-V-1986, E. G. Riley & D. A. Rider" (23♀, 11♂).

***Acrosternum (Chinavia) cubensis*, new species**

Figs. 1-5

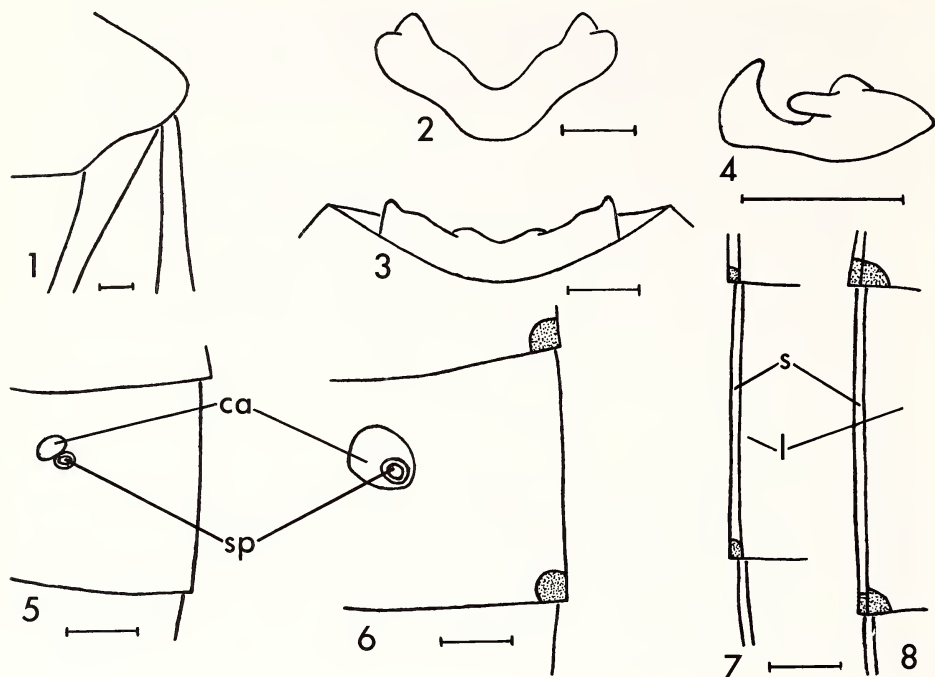
Description. Dorsum medium green, except head, anterior one-third of pronotum, and anterior two-thirds of scutellum dark green; a few pale-yellow spots on interstices between punctures on coria and scutellum. Anterolateral margin of pronotum and margin of head pale yellow, apex of tylus fuscous. Dorsal punctation dense, dark-green. Venter pale yellow, punctures green. Length excluding hemelytral membrane 11.2 mm.

Head narrowly rounded apically; lateral margin of each juga sinuous, nowhere parallel. Length of head 2.1 mm, width across eyes 2.6 mm. Each antenna with segment 1 green; segments 2 and 3 dark violet-brown; segment 4 pale green except basal one-sixth violet-brown; segment 5 pale yellow-brown; distal one-half of segment 3 and segments 4 and 5 distinctly pilose; length of segments 1-5 about 0.4, 1.0, 1.2, 1.7, 1.7 mm.

Pronotum 6.9 mm wide across humeri, mesial length 2.2 mm. Each humeral angle narrowly rounded, almost angular, distinctly produced beyond base of corium, but by less than half the width of an eye (Fig. 1). Anterolateral margin of pronotum straight. No black on cicatrices.

Scutellum 4.3 mm wide at base, 4.8 mm long, with 5 equally spaced white spots along base. No black on basal corners of scutellum. Corium rounded apically, reaching beyond middle of sixth (fifth visible) abdominal segment. Connexivum pale green, no black on posterolateral angles.

Rostral segments 2-4 about 1.4, 1.1, 0.8 mm, ventral surface with median black



Figs. 1-8. 1-5. *A. cubensis*. 1. Humeral angle, dorsal view. 2. Pygophore, caudal view. 3. Pygophore, ventral view. 4. Paramere. 5. Abdominal venter. 6. *A. montivagum*. Abdominal venter. 7. *A. wygodzinskiyi*. Connexival markings. 8. *A. marginatum*. Connexival markings. Symbols: callus (ca); laterotergite (l); edge of sternite (s); spiracle (sp). Dimensional lines equal 0.5 mm.

line bordered on both sides by crimson, apex of segment 4 black, terminating near posterior margins of metacoxae. Abdominal tubercle compressed, barely reaching posterior margins of metacoxae. Each ostiolar ruga extending about one-half distance from mesial margin of ostiole to lateral thoracic margin. Posterolateral angle of each sternite pale yellow. Each spiracle pale brown, located just outside posterolateral margin of distinct yellow callus (Fig. 5). Legs green, except coxae pale yellow, and some fuscous markings on tarsi.

Posterior margin of pygophore from ventral view sinuous, broadly and shallowly U-shaped, posterolateral angles prominent (Fig. 3); from caudal view distinctly sinuous, deeply U-shaped, biconical laterally (Fig. 2). Paramere as in Figure 4. Female not known.

Distribution. Cuba.

Holotype. ♂, labeled "CUBA, Guantanamo Bay Naval Base, Caravella Point, 2-IV-73, blacklight trap/H. M. Westbrook Coll." Deposited in the National Museum of Natural History, Washington, D.C. No paratypes.

Comments. In the revision by Rolston (1983), *A. cubensis* will key to couplet 32 containing *A. simplicis* Rolston and *A. euri* Rolston. *Acrosternum cubensis* can be

separated from these two species and all other New World congeners except *A. australe* Rolston by the spiracle-callus arrangement. *Acrosternum australe* and *A. cubensis* are the only two New World species with each spiracle located just outside the posterolateral margin of a distinct, yellow callus. *Acrosternum cubensis* can be separated from *A. australe* by the ostiolar rugae, which extend only about half the distance from the mesial margin of the ostiole to the lateral thoracic margin; the more prominent humeri; the pale-brown spiracles; and the green scutellar apex. *Acrosternum australe* is known only from northern Argentina.

ACKNOWLEDGMENTS

I would like to thank R. M. Baranowski (University of Florida, Tropical Research and Education Center, Homestead) for the loan of the specimen on which this description was based. I would also like to thank J. B. Chapin, J. A. Moore, and L. H. Rolston (Louisiana State University) for reviewing an early draft of the manuscript.

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Received February 28, 1986; accepted September 12, 1986.